

## PNEUMATIC ASSEMBLY FOR A PAINTBALL GUN

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### ABSTRACT OF THE DISCLOSURE

A pneumatic assembly for a paintball gun preferably includes a bolt slidable between an open and a closed position. The bolt preferably provides a firing mechanism for the paintball gun by permitting compressed gas to flow through the bolt to fire the paintball gun when the bolt is closed but preventing the transfer of compressed gas through the bolt when the bolt is open. This can be accomplished, for instance, by arranging a sealing member in communication with a surface of the bolt. A port is also preferably arranged through a lateral sidewall of the bolt at a predetermined location. The bolt preferably slides in relation to the sealing member such that when the bolt is open, the sealing member prevents compressed gas from flowing into the bolt, but when the bolt is closed, compressed gas is permitted to flow into the bolt. The bolt is preferably controlled by using a control valve such as an electronic solenoid valve to operate a pneumatic piston. A fixed-volume compressed gas storage chamber can be provided to supply a controlled volume of compressed gas to a projectile during a firing operation of the paintball gun and thereby improve gas efficiency.

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